## No. E-00000F-07-0199 Special Open Meetin Transcribed from a Video Record



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3	BEFORE THE ARIZ	ZONA CORPORATION COMMISSION
4	IN THE MATTER OF:	) DOCKET NO. E-00000F-07-0199
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7	Arizona Corporation Commission  DOCKETED	
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11	Date: April 25, 2013	REC CORP C DOCKET
12	Filed: May 22, 2013	
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15	PRESENTATION BY AR	IZONA PUBLIC SERVICE COMPANY
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1	THIS TEXT WAS TRANSCRIBED FROM A VIDEO RECORDING.		
2	BE IT REMEMBERED that a Commission Staff Meeting		
3	was held at the Arizona Corporation Commission,		
4	1200 West Washington Street, Phoenix, Arizona,		
5	commencing on the 25th day of April, 2013.		
6			
7	BEFORE: BOB STUMP, Chairman GARY PIERCE, Commissioner		
8	BRENDA BURNS, Commissioner BOB BURNS, Commissioner		
9	SUSAN BITTER SMITH, Commissioner		
10			
11			
12	APPEARANCES: For Arizona Public Service Company: Jim Wilde, Director of Resource Planning		
13			
14	Donna Easterly, Director of Statewide Delivery		
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19	Katherine A. McNally CERTIFIED TRANSCRIBER		
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- 1 THIS TEXT WAS TRANSCRIBED FROM A VIDEO RECORDING.
- 2 (Commencement of video recorded proceedings.)
- 3 CHMN. STUMP: All right. Welcome to the 2013
- 4 Summer Preparedness. We'll jump right in with APS. And
- 5 if you could introduce yourselves from your left to your
- 6 right, that'd be great.
- 7 MR. WILDE: Thank you, Chairman Stump, and good
- 8 morning, Commissioners. My name is Jim Wilde. I'm the
- 9 Director of Resource Planning for Arizona Public
- 10 Service. And seated to my left is Donna Easterly. She
- 11 is the Director of Statewide Delivery, also for APS.
- We appreciate the opportunity to talk with you
- 13 today about summer preparedness. We've got an agenda up
- 14 here on the screen that we've put up. We're going to be
- 15 covering loads and resources, and loads is simply
- 16 another word for peak demand and the resources that
- 17 we'll have to meet peak demand. So we'll be covering
- 18 peak demand and the resources that we have prepared for
- 19 that. We'll also be talking about fuel supplies, and
- 20 Donna will talk about maintenance activities, emergency
- 21 preparedness, and customer outreach.
- 22 So let's go ahead and get started. I think
- 23 everyone is familiar with our service territory, but it
- 24 helps always to kind of take a look at it, and it
- 25 reminds me of how broad our service territory is. It

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- 2 essentially stretches from the Colorado River, over east
- 3 to the White Mountains, and then north from the
- 4 Grand Canyon down south to, effectively, the border.
- 5 And you see the communities of Yuma and Douglas, also,
- 6 that we serve, so a very broad service territory.
- 7 And you can see some of the service statistics
- 8 that we have there in terms of the equipment that we
- 9 have and the infrastructure investment that we've made
- 10 to keep the lights on. So we've got 11 counties that we
- 11 serve and a whole lot of substations and distribution
- 12 and transmission equipment and generation assets to go
- 13 with that.
- 14 So let's talk about the generation resources for
- 15 just a minute. We'll summarize those, and then we'll
- 16 move on into what customer demand looks like.
- 17 So from a resource standpoint, we're all
- 18 familiar with the Palo Verde Nuclear Generating Station.
- 19 We own 29.1 percent of the plant and, for us, that
- 20 equates to 1,146 megawatts. We own some coal assets, as
- 21 you all are aware. And in this particular slide, we've
- 22 included the Southern California Edison share of Four
- 23 Corners. And we've also assumed here, as it says in
- 24 Footnote 1, the assumption of the retirement of the
- older units, Units 1, 2, and 3, so for 1,900 megawatts

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- 2 of coal.
- We've got some gas combined-cycle units -- some
- 4 of those are in the Valley here and some of those are
- 5 out near Palo Verde -- of almost 2,000 megawatts. We've
- 6 got some older gas/oil CTs and some steam units, and
- 7 these units are key for reliability in the Phoenix metro
- 8 area, because a lot of these units are inside the metro
- 9 Phoenix load pocket. And so some of those older units,
- 10 but very important units, and about 1,400 megawatts of
- 11 those.
- 12 And I think we've talked quite a bit about our
- 13 long-term contracts. We've got over 2,000 megawatts of
- 14 purchases that we've made. And some of those purchases
- 15 are with the merchant generation community. One
- 16 purchase is a diversity exchange with another utility,
- 17 and those purchases will start to expire beginning in
- 18 2015, so driving a future resource need out in the
- 19 future that we've talked about in the CAP resource
- 20 planning docket.
- 21 From a renewable standpoint, we've been
- 22 developing renewable energy, as you well know, and we've
- 23 also listed the nameplate capacity, which is simply
- 24 another word for the installed capacity.
- So for example, on a wind turbine, we might have

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- 2 a 100-megawatt facility, but based on the output profile
- 3 of that facility, that might produce 20 megawatts at the
- 4 time of peak, and so that's how we assess the
- 5 probability that we'll have peak or what we call
- 6 coincident peak output. So of 434 megawatts of
- 7 nameplate capacity, we have 161 megawatts that we would
- 8 actually count at the time of peak, for our loads and
- 9 resources table, giving us 8,998 megawatts of resources.
- 10 Let's move on now and talk about what the demand
- 11 looks like, or what we sometimes call "load." You can
- 12 see that if you go back to 2011, and even now through
- 13 2013, the forecast really hasn't changed a whole lot.
- 14 And I think we've talked a little bit about the slow
- 15 growth on our system. I know we've talked about the
- 16 effects of the recession, and really what we're seeing
- 17 today is slow growth.
- 18 We've talked about growth returning in the 2015
- 19 time frame, is when we believe that growth will more
- 20 materially return.
- 21 You can see the actuals there in the blue, in
- 22 2011, very close to forecast.
- In 2012, we had some "hotter than expected"
- 24 temperatures, and we had loads that were 140 megawatts
- 25 or so higher than what we had predicted, and we

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- 2 attribute that to the "hotter than expected" weather
- 3 that we had. And so you can see this year's forecast of
- 4 7,102 -- again, not a whole lot of change from what we
- 5 had been experiencing in the past -- a little bit of
- 6 growth, but not much.
- 7 So let's talk about what it looks like now when
- 8 we compare peak demand and the resources. So this is a
- 9 look at comparing those two in a reserve margin that we
- 10 always share. Reserve margins are really there to
- 11 account for uncertainty, and uncertainties like weather
- 12 and the economy, you know, we've talked about that a
- 13 little bit.
- But unplanned unit outages, if there's a forced
- 15 outage on a unit, we have to have reserves to cover
- 16 that. And then we also have customer programs that are
- 17 starting to ramp up, and as those customer programs ramp
- 18 up, our reserves will have to account for that. It'll
- 19 have to take that into consideration. So from a reserve
- 20 margin standpoint, we have a current reserve margin of
- 21 28 percent.
- 22 And let me just stop and talk about that for
- 23 just a second.
- In the resource planning docket,
- 25 Commissioner Pierce had issued a letter in that

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- 2 docket -- and I don't want to mix too many dockets here,
- 3 but I think it's important just to briefly talk about
- 4 it. We had a letter that talked about reserve margins,
- 5 and we responded to that letter. And we have a current
- 6 reserve margin of 28 percent.
- 7 Let me give some context around that, if I
- 8 could. We normally plan to a 15 percent reserve margin
- 9 as a minimum reserve margin. So as a minimum, there's
- 10 going to be some reasonable range around between
- 11 15 percent and something higher. You're not going to be
- 12 directly at 15 percent, because that's a minimum --
- 13 certainly not saying that you should be at 28 percent,
- 14 though.
- There's a couple of things that are really
- 16 driving our reserve margin today. In the past we've
- 17 talked about the recession, and this is all consistent
- 18 with what we said in Commissioner Pierce's letter, and
- 19 in our response to that. The recession alone has
- 20 dropped our load forecast by some 1,400 megawatts from
- 21 when we looked at our load forecast prior to the
- 22 recession. So if you compare what we thought we were
- 23 going to do for, say, 2013 to today, and you looked at
- 24 that before the recession, load forecast has dropped
- 25 considerably. That's probably the single-biggest driver

- 1 THIS TEXT WAS TRANSCRIBED FROM A VIDEO RECORDING.
- 2 that's affecting our reserve margin today.
- We also have some other things that are driving
- 4 the reserve margin currently. And one of those -- well,
- 5 I should say two of those things are resource
- 6 procurement commitments that we've made in the past.
- 7 And it takes just a little bit of history to understand
- 8 some of how that's -- how that's evolved.
- 9 But in 2005, there was a procurement commitment
- 10 that we made in the 2005 rate case for 1,000 megawatts
- 11 of additional capacity, and out of that commitment that
- 12 we made in the '05 rate case came two resources. One
- 13 was the call options that you see here that I call out,
- 14 and another was a merchant generation PPA, a purchase
- 15 from a merchant generator.
- And so I break out the call options only because
- 17 it's slightly different than what we had procured with
- 18 the steel in the ground. This is really an option to
- 19 purchase power from somebody else's steel in the ground.
- 20 And we only pay for it -- we pay a small demand fee, and
- 21 then we pay for it when we need it, like a strike price
- 22 on an option. We think of it kind of as an insurance
- 23 policy today. So it's a little bit different, but we
- 24 still call it capacity. It's still there when we need
- 25 it.

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- 2 So the reserve margin today is 28 percent, a
- 3 little bit higher than where we would want it to be
- 4 normally, and if you take out the call options, it's
- 5 19 percent. So the reserve margin today of 15 percent
- 6 roughly is about 1,000 megawatts, as a minimum, again.
- 7 So some reasonable bandwidth around that, I think, is
- 8 where we would want to be.
- 9 If you subtracted out the merchant generation
- 10 purchase that we made back in '05 -- or we actually made
- 11 the purchase in '06, the reserve margin would be
- 12 deficient to where we would want it to be. It would be
- 13 down around 11 percent.
- 14 So that's kind of some history, and I'm sure
- 15 we'll talk about it more next week in the IRP context,
- 16 but -- and again, I hate to mix too many dockets at one
- 17 time, but I just wanted to talk about that because it's
- 18 on the page and it's relevant to the conversation.
- 19 So that's where we stand today from a reserve
- 20 margin perspective. So let's -- if there's -- I'd be
- 21 happy to stop and take some questions on that now, if
- 22 you'd like, or if you want me to move on, I can move on
- 23 and finish, and we can talk about it later, or however
- 24 you want to do it.
- 25 CHMN. STUMP: I'm happy to take them now.

- 1 THIS TEXT WAS TRANSCRIBED FROM A VIDEO RECORDING.
- 2 Colleagues, any -- yeah, Commissioner Burns, then
- 3 Commissioner Pierce.
- 4 COM. BRENDA BURNS: Mine goes back -- mine goes
- 5 back a couple of slides. Just on the generation
- 6 resources, on renewables, you did say something about
- 7 nameplate that maybe I didn't get, but there's a
- 8 nameplate 434 megawatts, but capacity at peak is 161.
- 9 MR. WILDE: That's correct.
- 10 COM. BRENDA BURNS: Can you explain --
- 11 MR. WILDE: Yeah.
- 12 COM. BRENDA BURNS: -- the difference in those
- 13 numbers?
- 14 MR. WILDE: You bet. So what we do when we look
- 15 at renewable energy -- renewable energy, as we know, is
- 16 intermittent. It produces its energy when the wind
- 17 blows or when the sun shines. And so we look at the
- 18 output profile of all of our resources, and we compare
- 19 that output profile to when we need energy the most, at
- 20 5 p.m. on a summer afternoon. If the output profile
- 21 doesn't match up perfectly with the installed capacity,
- 22 then we reduce that capacity that we can depend on at
- 23 the time of our peak.
- 24 For example, when we look at wind, we've seen
- 25 wind profiles that are very strong in the springtime --

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- 2 April -- today it's windy. Our peak load isn't today,
- 3 though. And so when you compare the output of, say,
- 4 wind in Arizona, or even in New Mexico, for that
- 5 example, the output profile doesn't match perfectly with
- 6 when our peak occurs. So we ascribe to that a
- 7 probabilistic number that represents how much we're
- 8 going to get at our peak at 5 p.m. in the afternoon. So
- 9 for a wind project, that would be about 20 percent.
- 10 For a solar project -- we talked about this
- 11 quite a bit in the IRP workshop -- we ascribe to
- 12 single-access tracking solar -- today we ascribe about
- 13 70 percent capacity value and 50 percent to fixed panel.
- 14 I think we've also talked about that, over time, as we
- 15 get more penetration on our system, the capacity value
- 16 for the solar, especially, will tend to reduce because
- 17 our peak that we have to respond to will get pushed
- 18 later and later in the evening, such that when we peak
- 19 at 7:30 p.m., the sun's down at that point --
- 20 incrementally, solar will have zero capacity value. So
- 21 there's some capacity value today, while the penetration
- 22 is low, and then it'll reduce over time.
- Commissioner Burns, does that get to where you
- 24 want to --
- 25 COM. BRENDA BURNS: Yes, it does. And then

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- 2 probably the only other question, but I think it is. I
- 3 just wanted to make sure that DG, while it would be a
- 4 smaller component of it, that DG or rooftop solar is
- 5 included in those numbers.
- 6 MR. WILDE: The DG is actually not included in
- 7 this. It's taken out of what we consider that load to
- 8 be and what we consider those resources to be to meet
- 9 our load. So when we look at the load, the load has
- 10 already been reduced by the energy efficiency in the DG.
- 11 And so we plan to that net load, so it's not included in
- 12 here.
- 13 COM. BRENDA BURNS: And I mean, if it were, can
- 14 you put a number on it?
- MR. WILDE: Yeah, you bet. We've got about
- 16 250 megawatts today of installed distributed capacity --
- 17 installed, so nameplate -- and so for a peak basis, it
- 18 would be somewhere, call it 125.
- 19 COM. BRENDA BURNS: Thank you.
- 20 MR. WILDE: Okay. You bet.
- 21 CHMN. STUMP: And Commissioner Pierce?
- 22 COM. PIERCE: Sure. Thank you, Mr. Chairman.
- 23 And actually, same slide, I had some of those
- 24 questions, but also this -- and the way I look at it is
- 25 I know that -- and I'm going to do this your way -- that

- 1 THIS TEXT WAS TRANSCRIBED FROM A VIDEO RECORDING.
- 2 as we have a summer day and we peak to the load that APS
- 3 needs to cover, the solar load is peaking higher and
- 4 hitting -- and tailing off, and so that's why you value
- 5 it less.
- 6 MR. WILDE: That's correct.
- 7 COM. PIERCE: But you already account in -- and
- 8 we had this discussion last year -- we account in the DG
- 9 component, the fixed. But what about, no matter what,
- 10 you have to be prepared at the extreme, because it could
- 11 be a cloudy day and still very hot, where perhaps we
- 12 have a problem with the solar -- with the fixed -- with
- 13 any solar, so you're backing that up. And I know that
- 14 you have certain assurances that you deal with, but the
- 15 reality is you have to back it up.
- And so how much of this is in place because you
- 17 back -- have to back up solar? I quess the real
- 18 question is, If you're planning to have so much in
- 19 reserve capacity, would that really change? And does
- 20 that change and go down because you have solar, or does
- 21 it stay really exactly the same because you may not have
- 22 any solar? Although, that's not likely to happen
- 23 statewide, and you do have the utility scale ones spread
- 24 around, and we also have solar spread around, but it's
- 25 primarily in certain pockets in the Valley. So how much

- 1 THIS TEXT WAS TRANSCRIBED FROM A VIDEO RECORDING.
- 2 does solar take down what you need in reserve capacity?
- MR. WILDE: Yeah, right. So I think -- and
- 4 you're right, we spent a lot of time on this back in
- 5 August in the IRP workshop, and we had a lot of good
- 6 discussion about it.
- 7 Today what we ascribe to solar for, let's say,
- 8 for example, 100 megawatts of solar, and let's call it
- 9 distributed for your example, today we ascribe a
- 10 50 percent capacity value. So for example, in your
- 11 case, if we had 100 megawatts of solar, we would ascribe
- 12 50 megawatts of peak contribution, and we would have to
- 13 back up, essentially, that other 50 with a gas unit.
- 14 And so that's how we approach it today.
- But the point you're making, though, about the
- 16 capacity value, I think is very important, especially as
- 17 we get to it over time. One of the things that we
- 18 talked about in the IRP docket was with great -- and
- 19 today the levels are fairly small, so they're
- 20 manageable. And we take those things into account when
- 21 we assess our reserve margin; that's taken into account.
- 22 We have a process that takes that into account, an
- 23 engineering process called effective load carrying
- 24 capability, and it's a standard process throughout the
- 25 utility industry. That considers that.

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- But moving forward, I think, is where the
- 3 important issue is, and I think we need to think about
- 4 that. As we move forward with more penetration of solar
- 5 PV, the issue really becomes of, as that peak -- as our
- 6 thermal peak moves further towards sunset, the value
- 7 that a solar unit will contribute to my peak is
- 8 effectively zero at that point. So we'll be adding
- 9 resources, solar, let's say, but we'll still have to
- 10 back it up with another resource. And so at that point,
- 11 regardless of how much solar is added to the system,
- 12 I'll still have to build another resource for that
- 13 7:30 p.m. peak, when I'm peaking at dusk. Now, whether
- 14 that's a gas turbine or whether it's some sort of
- 15 storage device, if that's economic, by that time, I
- 16 don't know.
- 17 COM. PIERCE: Or you'll have to buy it on the
- 18 market and back -- be ready with resources that you're
- 19 purchasing or that you're --
- MR. WILDE: That's correct.
- 21 COM. PIERCE: -- you have an insurance backup,
- 22 so to speak.
- MR. WILDE: That's correct. You're right.
- 24 COM. PIERCE: And I won't get into this now, but
- 25 I would be interested in the cost breakout to go out and

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- 2 buy that on the market. Obviously, it's less expensive
- 3 if you own it, if you already have it.
- 4 MR. WILDE: Right.
- 5 COM. PIERCE: If you build something new, that
- 6 may not be so inexpensive.
- 7 MR. WILDE: That's correct.
- 8 COM. PIERCE: So it's really a balancing. And I
- 9 would -- I just kind of wondered, we build something new
- 10 to back it up, we buy it on the market, and in adding
- 11 those together, what is the real cost of renewable
- 12 energy? I'm thinking about the same thing on wind and
- 13 the fact that we have wind, but we already have
- 14 capacity, so are we really -- are we adding wind, and we
- 15 just got -- we have to find a place to wholesale it?
- 16 MR. WILDE: That's an excellent question. So I
- 17 think -- so let's stop and think about that for a
- 18 second, because I think your question is right on. As
- 19 we think about the cost, in our IRP our models take that
- 20 into account. And so when we think about the cost of
- 21 that backup generation that you mentioned, as we go
- 22 forward in time we're adding resources to that mix,
- 23 right? We're adding new resources, because the peak has
- 24 shifted and the capacity value has diminished, and those
- 25 resources, to your point, Commissioner, have a cost to

- 1 THIS TEXT WAS TRANSCRIBED FROM A VIDEO RECORDING.
- 2 them. So that's taken into account.
- But I want to talk about your market point,
- 4 because I think it's very good. In order to manage
- 5 solar generation and intermittency of renewables, we
- 6 will need generation that is flexible.
- 7 The market today has some surplus energy out
- 8 near the Palo Verde hub in the form of large
- 9 combined-cycle generating units. Those can be
- 10 effective, but what can be more effective at managing
- 11 the intermittency are combustion turbines. And so when
- 12 we go forward and think about how we want to develop the
- 13 fleet, if you will, prepare the resource plan for
- 14 meeting increased penetration of solar DE or increased
- 15 penetration of renewables in general, it's going to be a
- 16 mix of technologies. Yes, you will be able to use the
- 17 combined-cycle generation, no question about that. But
- 18 there's going to have to be a look at the need for
- 19 combustion turbines.
- If you look at California and some of the things
- 21 that they've been doing in terms of their policies and
- 22 so forth, they have added, or they are asking folks to
- 23 add, combustion turbines, because combustion turbines
- 24 can be started and stopped multiple times a day. A
- 25 combined-cycle unit really can't. So when we get those

- 1 THIS TEXT WAS TRANSCRIBED FROM A VIDEO RECORDING.
- 2 multiple peaks during the day that we've talked about, a
- 3 combustion turbine will probably be the way to manage
- 4 that.
- 5 COM. PIERCE: Because combustion turbine is a
- 6 ten-minute on.
- 7 MR. WILDE: That's correct.
- 8 COM. PIERCE: And I was kind of -- I didn't want
- 9 to just avoid the California comparison, but I think
- 10 what concerns me is they add a lot more renewable.
- 11 There'll be a demand. They want people to add, but if
- 12 people -- if merchants do not add capacity -- and
- 13 there's got to be some assurances for them to do that --
- 14 that could create a very expensive market for us in the
- 15 open market to buy excess capacity. It could be what
- 16 California does, because their market is so huge, and
- 17 how much renewable they plan to employ makes it very
- 18 difficult, I think, on our part, to judge what the cost
- 19 may be of not having owned generation by the monopoly.
- MR. WILDE: You are absolutely correct.
- 21 COM. PIERCE: Thank you.
- 22 CHMN. STUMP: Mr. Wilde, to that point of the
- 23 161 megawatts, how much is that? I don't believe you
- 24 told us. How much is that utility owned?
- MR. WILDE: I think today, I -- let's see, I've

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- 2 got the numbers here. But let me just say that the
- 3 preponderance of it is third-party PPA, and I think --
- 4 and I can provide you the numbers, Chairman Stump.
- 5 CHMN. STUMP: Okay.
- 6 MR. WILDE: But the preponderance of it is
- 7 third-party owned, because what makes up the lion's
- 8 share of it today is 300 megawatts of wind, and those
- 9 are all PPAs. There are some utility-owned solar
- 10 projects in there, but it's de minimus relative to the
- 11 third-party owned. And we can get you the exact numbers
- 12 on that.
- 13 CHMN. STUMP: Sure. And I know some of my
- 14 colleagues took a tour yesterday. How much would Solana
- 15 add to this mix, or how would that affect it?
- MR. WILDE: Yeah, it's going to be around 250 to
- 17 275 megawatts. And so we're hopeful to see that come
- 18 online. I think it's going to be a nice addition to the
- 19 mix.
- 20 CHMN. STUMP: Okay.
- MR. WILDE: And then, of course, that has
- 22 thermal storage to it, so that'll be able to continue
- 23 operating into the evening.
- 24 CHMN. STUMP: Okav. Commissioner Bitter Smith?
- 25 COM. BITTER SMITH: Mr. Chairman, Jim, just, I

- 1 THIS TEXT WAS TRANSCRIBED FROM A VIDEO RECORDING.
- 2 think, an obvious question and one I had continued to be
- 3 updated from you on. But I wanted, on the same chart,
- 4 to reference the note that talks about the assumption of
- 5 Four Corners. Can you, just for the benefit of all of
- 6 us, let us know how probably that assumption is? Are
- 7 there hiccups to that purchase acquisition?
- 8 MR. WILDE: Well, of course, I believe the
- 9 transaction is probable, and I fully expect it to
- 10 happen. Of course, we know that the outcome does not
- 11 fully rest in APS's hands at this point.
- 12 And so what we have, right now, is we have, of
- 13 course, the Navajo Nation in a process to purchase the
- 14 mine from BHP. And as that process continues, we expect
- 15 a successful outcome. We expect notification here
- 16 sometime in the second quarter from the Navajo Nation.
- 17 Once we hear their vote and how they want to proceed
- 18 with that, then it's our expectation that we'll finalize
- 19 the coal contract right after that, and then we'll
- 20 finish and consummate the transaction with SCE, yeah.
- 21 COM. BITTER SMITH: Thank you.
- MR. WILDE: Okay. You bet.
- 23 CHMN. STUMP: Commissioner Burns?
- 24 COM. BRENDA BURNS: To get back to the renewable
- 25 follow-up question to your conversation with

- 1 THIS TEXT WAS TRANSCRIBED FROM A VIDEO RECORDING.
- 2 Commissioner Pierce, and that is basically we will get
- 3 to a one-for-one replacement for backup energy
- 4 requirement at some point.
- 5 MR. WILDE: Right.
- 6 COM. BRENDA BURNS: How far away is that?
- 7 MR. WILDE: It really depends on the penetration
- 8 levels obviously. But, you know, right now the forecast
- 9 is going to be somewhere beyond the 2025 time frame, so
- 10 it's not currently in this current resource plan, based
- on today's forecast, until you get to a zero value.
- 12 COM. BRENDA BURNS: So were you at 50 percent
- 13 now?
- MR. WILDE: We're at 50 percent today, but
- 15 declining with every solar installation that occurs.
- 16 COM. BRENDA BURNS: Declining meaning you need
- 17 more?
- 18 MR. WILDE: The capacity value --
- 19 COM. BRENDA BURNS: Yeah.
- 20 MR. WILDE: -- goes down and we have to back it
- 21 up more.
- 22 COM. BRENDA BURNS: More.
- 23 MR. WILDE: And so the real wild card in that
- 24 is, What's the penetration going to be? And, of course,
- 25 we have an estimate that's in our IRP that you can see,

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- 2 and we'll be looking at that estimate again, and we're
- 3 in the process of updating that as we see new
- 4 installations come online. But it's really -- oops,
- 5 there we go. It's really something, based on today's
- 6 forecast, that I don't see it going to zero in this
- 7 planning cycle, but it will degrade substantially. And
- 8 so I think that's really the point, right? Whether it
- 9 gets to zero or whether it's 20 percent, I think to the
- 10 point we were talking about earlier, you're going to be
- 11 backing it up, and there's going to be costs associated
- 12 with that.
- 13 COM. BRENDA BURNS: And just real quick, the
- 14 long-term contracts, you didn't break those down. Are
- 15 any -- you said merchant and so on, but are there any
- 16 renewables there? Or what are they mostly?
- MR. WILDE: They're mostly gas, and there's a
- 18 diversity exchange agreement with another utility.
- 19 There's also, in that long-term contract line, there's
- 20 those -- the market call options that I talked about.
- 21 They're embedded in there now. And those start to
- 22 expire in two years, in 2015.
- 23 COM. BRENDA BURNS: Thank you.
- MR. WILDE: Okay.
- 25 CHMN. STUMP: Okay. Thanks.

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- 2 MR. WILDE: Okay. You bet.
- 3 So we talked about reserve margin a little bit,
- 4 but that is not the only measure of preparedness. I
- 5 want to spend just a minute and talk about what's called
- 6 maximum load serving capability -- and that's a very
- 7 utility term, I recognize that. It's a term that we've
- 8 grown comfortable with, and I hate to use utility speak,
- 9 but let me try to explain.
- 10 The maximum load serving capability -- and we
- 11 defined this for the metro Phoenix area -- is the
- 12 capability, the maximum capability to really keep the
- 13 lights on when you're fully utilizing your transmission
- 14 resources and fully utilizing your Valley generation
- 15 resources. It's really kind of a load pocket
- 16 constrained area. And so we look at that in terms of
- 17 what's the maximum capability to keep the lights on when
- 18 you are maximizing your transmission and maximizing your
- 19 generation in the Valley?
- 20 So this is also something that -- and you can
- 21 see APS, SRP -- this is something that APS and SRP work
- 22 very closely together on. We keep the lights on in
- 23 Phoenix together. And APS and SRP work closely together
- 24 because our systems are so intertwined. And we've got a
- 25 long history of a positive relationship with Salt, and I

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- 2 used to work for Salt many years ago. And this is
- 3 something that we take seriously, and we do work well
- 4 together.
- 5 But we can't do it without each other. And so
- 6 if you look at the load serving capability, we've got
- 7 load serving capability of around 14,500, plus or minus,
- 8 14,500. If you look at the loads -- and this is SRP and
- 9 APS combined, about 11,500, plus or minus -- and we've
- 10 had some forecasts and some actuals that are pretty
- 11 close to the forecast. You can see last year I talked
- 12 about the weather. It was no different for Salt River.
- 13 We had some unexpected hot weather, and so we had a
- 14 little bit of higher load there.
- This year we're expecting loads of about 11,700
- 16 in the Valley metro area. And as you can see by the
- 17 chart, we have the capability to keep the lights on. So
- 18 I think the bottom-line message here, not only with
- 19 APS -- and I'm sure Salt will talk about this in their
- 20 presentation -- but we're well prepared to keep the
- 21 lights on for this summer, not only on our system, but
- 22 as the Valley metro area.
- We look at a similar metric for the Yuma area.
- 24 We have a similar type of schematic here, with the
- 25 numbers, of course, being a lot smaller, but we have

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- 2 600 megawatts of load serving capability in Yuma, and we
- 3 have about 400 or so, a little bit more than
- 4 400 megawatts of load, and you can see that in 2011,
- 5 pretty close to forecast.
- We do have a little bit of load growth in Yuma
- 7 that's planned. There is some expansion at the Marine
- 8 Corps air base that we've taken into consideration here.
- 9 They're adding some barracks and some air-conditioning
- 10 and so forth, and we've incorporated that into the load
- 11 forecast. But again, we're well prepared to keep the
- 12 lights on, so we have what we need in Yuma.
- 13 So that kind of rounds out the discussion on
- 14 load serving capability and resources, and I was going
- 15 to move now and talk about fuel supplies, because
- 16 obviously you can't run a generator without fuel
- 17 supplies, so I was just going to spend just a minute
- 18 talking about fuel.
- 19 At Palo Verde we have all of our fuel
- 20 requirements sourced, contracted, through 2017, and all
- 21 of the inventories in place for this summer. So we are
- 22 well prepared at Palo Verde with fuel. We had a pretty
- 23 good year last year. It was the best production year
- 24 ever. And we had a good capacity factor. So things are
- 25 working well at Palo Verde. So plenty of fuel, and the

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- 2 operations are running smoothly.
- When it comes to the coal fleet, the situation
- 4 is similar. We have reserves in place to meet the
- 5 commitments that we have. We talked a little bit about
- 6 the Four Corners plant and the BHP Navajo mine.
- 7 Obviously we've got a sale transaction that's in the
- 8 process of taking place with the Navajo Nation there.
- 9 Current contract term runs through 2016, and of
- 10 course, the new contract will pick up where the old one
- 11 leaves off. We do have reserves in place at the mine.
- 12 And at the Cholla Power Plant, the situation is
- 13 very similar, except Cholla is not a mine-mouth plant.
- 14 The mine is in New Mexico. We have contract commitments
- in place through 2024, and that's with Peabody. It
- 16 doesn't say that on here, but that's with Peabody. And
- 17 again, we have reserves in place as we need them.
- 18 So we have plenty of coal, plenty of nuclear
- 19 fuel to do what we need to do to keep the lights on.
- Natural gas, we've talked a little bit about
- 21 that. That's a very important fuel, and we talked about
- 22 it not only from a peak demand perspective, but we've
- 23 talked about natural gas from what we call a load
- 24 following perspective. And what that means is as the
- 25 load bounces around during the day, and as we have

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- 2 intermittent renewables on our system, we have to have
- 3 natural gas resources that are flexible enough to
- 4 respond to that, and so the natural gas component is
- 5 very important.
- 6 So currently we have sufficient pipeline
- 7 transportation in place. We have sufficient supplies in
- 8 place of gas to meet our needs, and I think as we've
- 9 mentioned before, El Paso Natural Gas is really the
- 10 primary provider of pipeline capacity. El Paso Natural
- 11 Gas has pipeline capabilities to all of our facilities.
- 12 But we have some level of redundancy with the Yucca
- 13 facility down in Yuma and with the Redhawk and the
- 14 Sundance Power Plant.
- The Transwestern Pipeline has capacity to those
- 16 plants, and so we do have dual fuel capability or dual
- 17 pipeline capability, if you will, at those power plants,
- 18 and the North Baja Pipeline serves Yucca down in Yuma,
- 19 Units 5 and 6, and El Paso serves the remaining units.
- 20 So again, with natural gas, we've got plenty of supply
- 21 on hand and plenty of transportation capability.
- So I think that rounds out my section of the
- 23 presentation. And if there are no questions that I've
- 24 got, I'll turn it over to Donna. But I'll wait for
- 25 questions.

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- 2 CHMN. STUMP: Thanks. Commissioner Burns?
- 3 COM. BRENDA BURNS: Thank you. I think we ask
- 4 this every time we go -- I can't get my microphone --
- 5 every time we just broach the natural gas subject, and
- 6 I'm hearing you say that, you know, you don't have a
- 7 problem, you've got plenty of supply. And yet there are
- 8 a number of companies -- and we've had discussions --
- 9 who've had some interest in natural gas supply here in
- 10 the state. Is there anything else going on, or is it
- 11 pretty much no longer a discussion, are you aware?
- MR. WILDE: In terms of natural gas supply, or
- in terms of natural gas storage?
- 14 COM. BRENDA BURNS: Storage, storage.
- MR. WILDE: Yeah. There's really no current
- 16 discussion, that I'm aware of, on storage. We looked at
- 17 storage a few years back, and there were some
- 18 possibilities that we looked at south of the Valley,
- 19 down near Picacho Peak, kind of some underground salt
- 20 caverns, if you will. And as we looked at the cost of
- 21 that, it really just didn't pencil out.
- And so with the pipeline capabilities that we
- 23 have today, you know, we've looked at other storage
- 24 options. Should we look at storage in Texas, for
- 25 example, or some other location? It really doesn't

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- 2 provide you that same level of closeness, if you will,
- 3 that something in Arizona would. And so I think the
- 4 notion is still interesting to us. It would be nice to
- 5 have storage capability and the flexibility that that
- 6 would provide close to us in Arizona.
- 7 COM. BRENDA BURNS: In Arizona, right.
- 8 MR. WILDE: But the capabilities just don't
- 9 exist with the geologic formations that we've got, and
- 10 the cost is just prohibitive right now. So I think it's
- 11 an interesting concept, but it just hasn't penciled out.
- 12 CHMN. STUMP: Mr. Pierce.
- 13 COM. PIERCE: Mr. Chairman, thank you. I'm
- 14 looking at overall supply. And storage, I think, would
- 15 be helpful. But you see the lines and actually you
- 16 don't show -- because these are the looping lines on the
- 17 California side, but actually these lines go in and
- 18 supply natural gas into California.
- MR. WILDE: That's correct.
- 20 COM. PIERCE: And with the renewable standard
- 21 that California's adopted, and with the San Onofre
- 22 Nuclear Power Plant, which I'm not sure will ever
- 23 reopen -- and so I look at this summer as maybe a test,
- 24 and I -- although next year will be my last summer
- 25 preparedness, I'd almost really like to see a series of

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- 2 sheets or slides on the impact, because they may have a
- 3 perfect storm coming as they reduce power supply from
- 4 coal that -- from Four Corners and from NGS, as they
- 5 reduce the amount -- or as they increase the amount of
- 6 renewable and the demand that's going to -- because you
- 7 pointed out earlier, they would like to see gas-powered
- 8 plants, not combined-cycle, but the --
- 9 MR. WILDE: The combustion turbines.
- 10 COM. PIERCE: Yeah, combustion turbines, and
- 11 what that will do in the marketplace, not just on price,
- 12 but for natural gas. And do we have enough pipeline
- 13 capacity to take care of our needs in Arizona and the
- 14 needs in California without impacting price, so much, or
- 15 actually impacting our ability to fire up our power
- 16 plants at peak?
- MR. WILDE: Yeah. No, I think that's a great
- 18 question.
- Just some context around California, first, and
- 20 then we'll talk about capabilities and what that looks
- 21 like going forward. California gets gas supply from
- 22 many different locations. It gets a significant amount
- of its gas supply from the north, from Canada, through
- 24 transportation that comes down through Northern
- 25 California. It also gets supply through the Kern River

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- 2 Pipeline that comes out of the Rockies area into
- 3 Southern California, and a new pipeline called the Ruby
- 4 Pipeline, that goes essentially, again, from the Rockies
- 5 area into Northern California. So there's a significant
- 6 amount of supply that comes non-El Paso based into
- 7 California.
- 8 But Commissioner Pierce, your point is good,
- 9 because this -- if we think about how we rely on the
- 10 renewable capacity and how we credit that in our loads
- 11 and resources table I think is an important concept to
- 12 think about from a gas supply-and-need perspective.
- And to your point, we're all going to be relying
- 14 on natural gas more in the future. There's no question
- 15 about that.
- 16 In the near term --
- 17 COM. PIERCE: Well, especially California will,
- 18 because they've said -- I mean, if they're closing
- 19 nuclear and they're shutting the coal production that
- 20 would come in -- the electrons that would be produced by
- 21 coal, I mean, they're kind of narrowing the box they can
- 22 fit into. And if us and all the states nearby --
- 23 especially those of us who have solar -- and as you
- 24 said, their backup will eventually be one-to-one as
- 25 well, that's a lot of natural gas.

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- MR. WILDE: It is a lot of natural gas. And so
- 3 from a supply perspective, it's really not a supply
- 4 issue, but maybe to your point, it's a transportation
- 5 issue. And so there's sufficient supply with the shale.
- Now, the question is, How do we get it to the
- 7 place where we need it? And so today there's sufficient
- 8 supply. And for this summer there'll be sufficient
- 9 supply. San Onofre wasn't online last summer, and to
- 10 your point, hard to say whether it will ever be on
- 11 again, but from an ongoing perspective, there's a couple
- 12 of things going on to look at this.
- Number one, there is a compression available on
- 14 pipelines that can be either, A, restarted or, B,
- 15 developed. We've had discussions with pipelines, and
- 16 we've talked about adding compression to pipelines. It
- 17 very well could be in the near future. I don't know
- 18 whether it will be in the next few years, or perhaps
- 19 before 2020, where we'll have to think seriously about
- 20 adding gas compression to the pipelines, and there'll be
- 21 a cost associated with that. And that's going to be
- 22 something that we'll probably have to do in Arizona at
- 23 some point. I don't have an exact prediction of when
- 24 that will be, but at some point we will.
- There are some studies that are being developed

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- 2 right now -- and I'm participating in one of them
- 3 through the Western Interstate Energy Board, through
- 4 WGA. And we've gathered together all of our folks from
- 5 around the West, and we're going to conduct an RFP that
- 6 we've been talking about, to look at what is the
- 7 pipeline capability, and do some scenario planning. And
- 8 it'll look at what happens if coal units retire,
- 9 prematurely, and what happens if renewables -- the
- 10 penetration increases more dramatically than what we may
- 11 have forecast. So just starting that work, but there is
- 12 work being done on that.
- I think your point is a good one, we need to
- 14 look at it a little bit more. But in the near term, I
- 15 think we have some flexibility with added compression on
- 16 pipelines.
- 17 COM. PIERCE: Thank you.
- 18 CHMN. STUMP: Yeah, Commissioner Bob Burns.
- 19 COM. BOB BURNS: Yes, thank you, Mr. Chairman.
- Let me understand on this suppression you're
- 21 talking about. To me that means added pressure in the
- 22 line, right? So adding pressure to the line, how does
- 23 that affect the safety of the line?
- MR. WILDE: Well, I don't think -- you know, in
- 25 terms of the pipeline, I'm not a pipeline expert, and so

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- 2 in terms of the compression, in terms of the pressure on
- 3 the pipeline, there are safety regulations that the
- 4 pipelines would have to submit to, and they wouldn't be
- 5 adding compression. There's already compression on the
- 6 pipelines. But we wouldn't add compression on
- 7 pipelines, or pipelines themselves wouldn't add
- 8 compression in an unsafe manner, and they're regulated
- 9 like we are.
- 10 And so in terms of the safety, I don't know that
- 11 there's a specific safety risk in doing that. I think
- 12 if they went outside of the bounds of what their
- 13 regulations would require, then perhaps there would be,
- 14 but I wouldn't suspect that any of the pipelines would
- 15 go beyond what their regulations would allow. I think
- 16 there is sufficient capability, though, to add
- 17 compression to pipelines that would be within the bounds
- 18 of what the pipelines regulations would allow and what
- 19 they would consider safe. But again, I'm not an expert
- 20 on what the pipelines can and cannot do --
- 21 COM. BOB BURNS: Yeah, well --
- MR. WILDE: -- in terms of safety.
- COM. BOB BURNS: Yeah, Mr. Chairman, but still
- 24 that would be a limiting factor as to how much gas could
- 25 be moved through that pipeline, right? I mean, they

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- 2 can't exceed their capacity, and they can't exceed their
- 3 pressure limits and so forth, so --
- 4 MR. WILDE: That's correct. And so at some
- 5 point -- and I don't know when that point will be, I
- 6 think it's not in the near future -- but at some point
- 7 we would have to look to the gas pipeline companies to
- 8 construct new pipelines. And so as everyone moves to
- 9 gas, this is the concern moving forward. And so I think
- 10 new pipelines ultimately, and new infrastructure for
- 11 that, would have to be developed.
- 12 COM. BOB BURNS: Thank you.
- 13 CHMN. STUMP: Great. Thanks.
- 14 MR. WILDE: Okay. So with that, I'm going to
- 15 turn it over to Donna, and she's going to talk about
- 16 statewide delivery. So I think we're going to switch,
- 17 aren't we?
- MS. EASTERLY: You run it.
- 19 MR. WILDE: Oh, you want me to run it?
- MS. EASTERLY: That's fine.
- 21 Chairman Stump, Commissioners, good morning.
- 22 It's good to be here this morning.
- So for the remainder of the presentation, I'm
- 24 going to touch on planned reliability activities,
- 25 emergency response and preparedness, as well as customer

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- 2 outreach and communication efforts.
- 3 Our planned reliability activities are designed
- 4 to make sure that our system and infrastructure are
- 5 ready to meet the summer demand. And we have a number
- 6 of programs in place to ensure substation equipment
- 7 health, and so I'm going to touch on just a couple of
- 8 those.
- 9 We have realtime monitoring equipment on our
- 10 critical assets, which would be our large substation
- 11 transformers, and essentially this allows us to identify
- 12 potential issues prior to a failure occurring. Also
- 13 within our substations we have a variety of predictive
- 14 and preventive maintenance initiatives that we actually
- 15 execute on throughout the year. One of those, as an
- 16 example, is thermography scanning, which simply put is,
- 17 through infrared we're able to identify any hot spots
- 18 that may be occurring on our lines or our equipment or
- 19 connections. Again, an opportunity to identify a
- 20 failure before one occurs.
- 21 And we have a myriad of other programs in place
- 22 from a preventive maintenance standpoint, such as aged
- 23 equipment replacements. We also do wood pole
- 24 inspections and replacements, as well as a cable
- 25 replacement program, just to name a few.

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- We also do annual line patrols, and this is a
- 3 visual inspection of our transmission and distribution
- 4 lines for any needed maintenance and repairs.
- 5 Additionally, on a monthly basis, we do substation and
- 6 capacitor bank checks, again, just to ensure that our
- 7 equipment is operational and functional as we move into
- 8 the summer months.
- 9 Another area of focus is vegetation management
- 10 and wildfire planning, again, with ongoing drought
- 11 conditions, a few things we do from a preparedness
- 12 standpoint. In the spring of each year we attend the
- 13 annual wildfire academy in Prescott. We also
- 14 participate in pre-wildfire season meetings with five
- 15 national forests, and really both of these events, the
- 16 academy, as well as the preseason meetings, not only are
- 17 they a great opportunity for us to network and get
- 18 reacquainted with forestry personnel, but also with our
- 19 field fire personnel, but it's also a great opportunity
- 20 to review incident command protocols, roles and
- 21 responsibilities, as well as communication expectations
- 22 in the event of a wildfire.
- 23 Internally we take some measures to prepare our
- 24 APS personnel for fire season. This would be our first
- 25 responders or our trouble men, and so we want to ensure

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- 2 that they understand the dos and don'ts when entering
- 3 into fire-restricted areas.
- 4 Also, they are responsible to have a handful of
- 5 supplies with them, such as five gallons of water, fire
- 6 extinguishers, things of that nature. So again, an
- 7 opportunity to prepare them prior to the fire season.
- We also have a vegetation management program,
- 9 where on a cyclical basis, we patrol our transmission
- 10 and distribution rights of way, and our goal here is to
- 11 ensure that our transmission corridors are clear of any
- 12 low-lying brush, as well as our distribution
- 13 subtransmission and transmission lines that they are
- 14 clear also. So from a vegetation management
- 15 perspective, through our rights of way and line
- 16 clearing, our goal is to enhance reliability and also
- 17 reduce the chance of wildfires.
- 18 So I'll spend just a couple of minutes now on
- 19 emergency preparedness and response. We interface
- 20 regularly, actually weekly, with emergency managers,
- 21 public safety personnel at the state, county, and local
- 22 levels, as well as with our peer utilities, when it
- 23 comes to emergency preparedness and response.
- 24 Additionally, we participate in statewide
- 25 exercises and mock drills. For example, in the fall of

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- 2 last year, we participated in an emergency evacuation
- 3 exercise, tabletop exercise with the Department of
- 4 Health Services. Right now we're in the planning stages
- 5 of the 2013 emergency exercise statewide that is
- 6 actually scheduled for November of this year. We do
- 7 incident command coordination and training, and finally
- 8 we also coordinate tours of our critical facilities.
- 9 Last September we had a tour of our Westwing facility
- 10 for all of our West Valley firefighters and other
- 11 personnel, and we plan to do the same at our Pinnacle
- 12 Peak facility this coming fall.
- And when we have an event, a specific event,
- 14 such as an extended outage, a few things we do from a
- 15 customer outreach standpoint. We do targeted
- 16 communications to customers, as well as emergency
- 17 managers and public safety personnel within the local
- 18 area. We also work very closely with emergency managers
- 19 in terms of establishing shelters. Depending on the
- 20 situation, if the emergency managers feel that a shelter
- 21 is warranted, we certainly will partner with them and
- 22 help with those coordination efforts.
- We take a couple of approaches when it comes to
- 24 dry and bagged ice for our customers in the event of an
- 25 extended outage. Depending on the logistics, the area

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- 2 that's impacted, we'll do one of two things. We'll
- 3 either establish a location where we will hand out the
- 4 dry or bagged ice to our customers, or we may partner
- 5 with a local grocery store, perhaps a Wal-Mart, where
- 6 our customers can go get their dry and bagged ice, and
- 7 then we will, in turn, reimburse them for their
- 8 purchase.
- 9 We have a medical care preparedness program.
- 10 This is for our customers who are on life-sustaining
- 11 medical equipment. And in the event of an extended
- 12 outage, we make contact with these customers to give
- 13 them the details of the outage, but our real goal here
- 14 is to provide these customers with information so that
- 15 based on their medical needs, they can decide if they
- 16 need to make other arrangements. Throughout the
- 17 duration of the outage, we stay in touch with these
- 18 customers, and then, of course, we follow up with them
- 19 once power has been restored.
- We have a couple of sources that we use in terms
- 21 of communicating with our customers. As with most
- 22 utilities, we have a call center that's a 24/7 operation
- 23 with live agents, and within the call center we use what
- 24 we call an interactive voice response system, which
- 25 allows us to put recorded messages with details of the

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- 2 extended outage. It's typically the areas impacted,
- 3 estimated time of restoration and a cause, if we know
- 4 it. As we continue to hear from our field personnel
- 5 during the restoration efforts, we will update this
- 6 message accordingly. And then, in turn, when the power
- 7 is restored, we use the same system to do outbound calls
- 8 to our customers, and we want to ensure that their power
- 9 is, in fact, back on. And oftentimes during this
- 10 outbound call, we may find that there are pockets of
- 11 customers or perhaps maybe a single customer who might
- 12 still be without power, so it's an opportunity for us to
- 13 respond at that time.
- 14 Through our corporate communications group, we
- 15 communicate with the news media. We have a 24-hour
- 16 hotline that's monitored. We also have access to
- 17 Arizona Department of Public Safety's media alert
- 18 system. What this allows us to do is call into one
- 19 number that gets us into the news centers of the major
- 20 media outlets, where we can leave one message with the
- 21 outage details to all of them at one time.
- 22 And then finally we take advantage of social
- 23 media to communicate with our customers. We use
- 24 Facebook and Twitter, again, typically the same type of
- 25 information. And while we're not able to use it yet, we

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- 2 certainly recognize that text messaging is a popular way
- 3 of communicating these days, and so that's something
- 4 that is on the horizon in terms of a way of
- 5 communicating to our customers.
- 6 CHMN. STUMP: Commissioner Burns.
- 7 COM. BRENDA BURNS: Yes, I just had a question.
- 8 You may have said it; I may have missed it. But is
- 9 there something special for people who have -- they're
- 10 at home but they have medical equipment they need and so
- 11 on, specific cases? Do they -- is there some sort of
- 12 registration people can have with you? I didn't see
- 13 that covered here, but I may have missed it. Is there a
- 14 targeted --
- MS. EASTERLY: Yes, Chairman Stump,
- 16 Commissioner Burns, what we do is our customers fill out
- 17 an application to apply for the medical care
- 18 preparedness program. And so once we get that
- 19 information back from the customer, we identify them in
- 20 our customer information system, with a little red
- 21 cross. And then in turn, we send those customers a
- 22 packet of outage information, as well as just
- 23 information about the program, but it provides them tips
- of how to be prepared for an outage.
- One thing new that we're actually doing this

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- 2 year in that packet for these medical monitored
- 3 customers is we're providing them with a sticker, if you
- 4 will, that's got APS's phone numbers on it, encouraging
- 5 them to place that right on their medical equipment for
- 6 easy reference, in the event of an outage.
- 7 COM. BRENDA BURNS: And how do they know to take
- 8 this step and sign up with you? How are they alerted
- 9 that there's even this program?
- 10 MS. EASTERLY: You know, that's a great
- 11 question, Commissioner Burns.
- I don't believe it's part of the questioning
- 13 when a customer signs up for service. I am aware that
- 14 at times we will put maybe messages within our billing
- 15 that lets customers know of this program, but I can
- 16 certainly get back with you on that.
- 17 COM. BRENDA BURNS: I wonder about any
- 18 partnering with anyone who leases out the kind of
- 19 medical equipment or certain healthcare providers. I
- 20 don't know. It can't be a perfect thing, but we want to
- 21 do the best to reach as many people as possible so they
- 22 know it's there. So it would be interesting to
- 23 brainstorm some ideas.
- 24 MS. EASTERLY: Absolutely. Thank you for that.
- 25 CHMN. STUMP: And, Ms. Easterly, I have a

- 1 THIS TEXT WAS TRANSCRIBED FROM A VIDEO RECORDING.
- 2 question as well. I recently attended a summit with
- 3 Secretary Vilsack on transmission and wildfire
- 4 preparedness efforts. I think it's safe to say we
- 5 determined that Arizona utilities were doing a pretty
- 6 good job on that score, with regard to vegetation
- 7 management, and that our chain from smoke was actually
- 8 what seemed to be a more pressing issue.
- 9 What, if anything, can utilities do to mitigate
- 10 something like that? I mean, it's -- it would strike me
- 11 that there's not much you can do.
- MS. EASTERLY: Chairman Stump, yes. When I
- 13 mentioned the efforts that we take to keep our
- 14 transmission corridors clear of the low-lying brush,
- 15 when there is a lot of brush, one of the challenges that
- 16 we have is the smoke gets up into our lines and the
- 17 particulates and that can cause us challenges. But in
- 18 terms of anything else, that's really keeping our
- 19 corridors clear is very important.
- 20 CHMN. STUMP: It seemed as though, as I say, the
- 21 arching was an issue that regardless of how clear you
- 22 keep it, you can't control the flow of the smoke,
- 23 needless to say, and so I guess you just do the best you
- 24 can in that regard?
- MS. EASTERLY: Yes.

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- 2 CHMN. STUMP: Okay. Great.
- MS. EASTERLY: So in summary, we feel very
- 4 comfortable that our generation resources, fuel
- 5 supplies, and transmission capacity are in place to meet
- 6 customer demand this summer. Our predictive and
- 7 preventive maintenance efforts are well underway and on
- 8 track. We will continue our ongoing coordination,
- 9 integration efforts with emergency planners, public
- 10 safety personnel at the county, state, and local levels,
- 11 and finally we will continue to use a variety of sources
- 12 to communicate with our customers when we have an
- 13 extended outage or any type of significant event.
- 14 Chairman and Commissioners, that concludes our
- 15 portion of the presentation. If there's any other
- 16 questions, I'd be happy to take them.
- 17 CHMN. STUMP: Okay. Any other questions for
- 18 APS?
- 19 FEMALE SPEAKER: Sorry, we haven't been able to
- 20 see each other very well today.
- MS. EASTERLY: I have a long neck.
- 22 COM. PIERCE: Mr. Chairman.
- 23 CHMN. STUMP: Yeah, Commissioner Pierce.
- 24 COM. PIERCE: And I think that monitor on this
- 25 side is mainly for someone at the Staff table. And so I

1 THIS TEXT WAS TRANSCRIBED FROM A VIDEO RECORDING. don't know that we really need it today. 2 By the way, this monitor here simply is the same 3 4 thing you see, but when there's not a presentation, it allows me to be able to see if Commissioners Burns on 5 the other end or Commissioner Bitter Smith, when they're 6 7 speaking, it allows us to see what people who have it on 8 their monitor at home can see. That way I can -- you 9 know, I don't have to do this. 10 FEMALE SPEAKER: I think if I got a booster seat, that would take care of it. 11 COM. PIERCE: But because I'm nearsighted, this 12 also is really, really clear for me, the presentations. 13 CHMN. STUMP: Nearsightedness, booster seats --14 we have some issues here, anyway, along with our 15 technology. But great. Well, thanks to you both. 16 MS. EASTERLY: Thank you for your time. 17 CHMN. STUMP: Appreciate it very much. 18 (Conclusion of recorded video proceedings on 19 20 Item 6, at 55 minutes, 45 seconds.) 21 22 23 24

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